

Statement of Basis of the Federal Operating Permit

Axiall, LLC

Site/Area Name: Pasadena Facility
Physical location: 3503 Pasadena Fwy
Nearest City: Pasadena
County: Harris

Permit Number: O1621
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2865
SIC Name: Cyclic Organic Crudes and Intermediates

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document includes the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: August 10, 2015

Operating Permit Basis of Determination

Permit Area Process Description

Cumene Production Process

The Axiall, LLC - Pasadena Facility cumene process uses benzene and propylene as raw materials. Benzene is received from several suppliers via ship or barge and stored in tanks T-14, T-1, and T-2. Propylene is purchased on the spot market and received as a propylene/propane (P/P) mix. Import is by rail, truck or pipeline, and is supplied by various companies via a grid system. The P/P mix is stored in the T-3 sphere.

The P/P mixture is treated in two towers to remove traces of ethylene and butene, which can result in impurities in the product. The mixture is then combined with benzene from storage and fed to two reactors. The reactors operate in series and react benzene and propylene in the liquid phase in the presence of a zeolite catalyst to form isopropyl benzene (cumene).

Effluent leaving the bottom of the second reactor is passed to two rectifiers where propane is split off and either used as reflux or recovered as LPG product. Non-condensibles are used as fuel for the hot oil heater. The bottoms from the rectifiers are split into a benzene rich stream, which is returned to the reactors, and cumene rich stream in the recycle benzene column. The cumene rich stream is further refined in the cumene columns to recover cumene in the overheads. The product is sent to two rundown tanks.

The bottoms stream from the cumene columns, which contains heavy aromatics, is fed to the diisopropyl benzene (DIPB) column to produce a side stream of DIPB. The stream is mixed with benzene and reacted in a transalkylation reactor to produce cumene.

Process heating is provided by a hot oil system. A hot oil heater located at the south side of the unit heats the oil. The heater is gas fired, and burns distillation fuels from the Cumene Unit.

Vapors from all relief valve discharges and vent streams not returned to the process are sent to a five-stage pressure-assisted flare system located north of the process unit. The flare system operates at or greater than 98% destruction efficiency for organics. The flare is on-line at all times while the Cumene Plant is operating. Flare pilots are monitored continuously by thermocouples, which alarm and are recorded in the Cumene Control Room. The first four stages of the H-2 Flare consist of rows of ground level burners with the fifth stage consisting of an elevated flare.

Phenol Production Process

In the phenol manufacturing process, the raw material cumene is fed continuously to a series of oxidizers. Air is mixed with the cumene in the oxidizers to produce cumene hydroperoxide (CHP). The cumene hydroperoxide intermediate is then converted to crude phenol and acetone using a sulfur dioxide catalyst. This mixture is distilled to produce phenol, acetone, and alpha styrene (AMS). The bottoms from the phenol and acetone distillation process produce a high molecular weight hydrocarbon tar (phenol tar) and a wet acetone stream, respectively. Both streams are used as fuel in the adjacent Cumene Plant Hot Oil Heater. The Phenol Plant products are shipped in tank trucks, rail cars, barges and ships.

There are no process vents in the Phenol Plant that vent to the atmosphere. Process vents throughout the plant are collected through one of the two slurp vent control systems. Slurp 1 handles cumene vent streams, while slurp 2 handles all other vent streams. Each slurp system consists of a duct system connected to a blower that collects the vent gases. Sufficient atmospheric air is admitted to guarantee that the flammable vapor concentration will always be below the lower explosive limit (LEL). Both slurp systems vent to the inlet of the regenerative thermal oxidizer, which heats the gas to 1800°F and has a VOC destruction efficiency of greater

than 98%. At that temperature, the organic pollutants are oxidized (burned) to form carbon dioxide and water. The gas is then cooled and discharged to the atmosphere.

Phenol Plant VOC-containing water streams from rainwater and the process area are sent to the covered, vapor-controlled phenolic or non-phenolic oil/water separators. Wastewater sent to the phenolic oil/water separator is sent to the V-2017 oil/water separator, followed by biological treatment. After treatment, the wastewater is discharged into the Houston Ship Channel.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NO _x , HAPS
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Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield

- New Source Review Authorization References
- Compliance Plan
- Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements

(exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that

cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A

permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.

25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled “Basis of Determination.” Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes.

For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
CT-1	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-ALL	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Alternative monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Design Capacity = Design capacity to circulate less than 8000 gpm.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = Minor modifications to the monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Flow Monitoring/Testing Method = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2).</p> <p>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.</p>
CT-3	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-ALL	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Alternative monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Design Capacity = Design capacity to circulate less than 8000 gpm.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = Minor modifications to the monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Flow Monitoring/Testing Method = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2).</p> <p>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.</p>
CT-4	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-ALL	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Alternative monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Design Capacity = Design capacity to circulate less than 8000 gpm.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = Minor modifications to the monitoring and testing methods approved by the executive director as allowed in § 115.764(f) are being used.</p> <p>Flow Monitoring/Testing Method = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2).</p> <p>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
D-13CU	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-032	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
FU-1	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-ALL	Agitators = The fugitive unit does not contain agitators. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit does not contain process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. Weight Percent HRVOC = All components contact only a process fluid that contains at least 5.0% HRVOC by weight on an annual average basis. Bypass Line Valves = The fugitive unit does not contain bypass line valves. Flanges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit contains pump seals.
FU-1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
FU-1	40 CFR Part 63, Subpart H	63HALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
FUG-1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
FUG-1	40 CFR Part 63, Subpart H	63HALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
FUG-2	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
FUG-2	40 CFR Part 63, Subpart H	63HALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-EXHEHAP	40 CFR Part 63, Subpart F	63F-005	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
GRP-EXHEPR	40 CFR Part 63, Subpart F	63F-003	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
H-1	30 TAC Chapter 117, Subchapter B	R7ICI-507	<p>Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Unit Type = Process heater</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.</p> <p>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one hour average</p> <p>NOx Reduction = Forced flue gas recirculation</p> <p>Fuel Type #1 = Natural gas</p> <p>NOx Monitoring System = Continuous emissions monitoring system</p> <p>Annual Heat Input = Annual heat input is less than or equal to 2.2(10¹¹) Btu/yr, based on a rolling 12 month average.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)</p>

Unit ID	Regulation	Index Number	Basis of Determination*
H-1	30 TAC Chapter 111, Visible Emissions	R1111-004	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
H-2	30 TAC Chapter 111, Visible Emissions	R1111-002	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p> <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p>
H-2	30 TAC Chapter 115, HRVOC Vent Gas	R5720-ALL	<p>Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).</p> <p>Out of Service = Flare was not permanently out of service by April 1, 2006.</p> <p>§115.725(e) Requirements = Flare is complying with the requirements of § 115.725(d).</p> <p>Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.</p> <p>Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.</p> <p>Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.</p> <p>Exempt Date = Flare has not become exempt.</p> <p>Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).</p> <p>Alternative Monitoring = Using alternative monitoring and test methods approved by the executive director.</p> <p>Physical Seal = Flare is equipped with a physical seal.</p> <p>Monitoring Operations = Using actual measurements.</p> <p>§115.725(h)(4) Alternative = Using the continuous monitoring requirements in § 115.725(d)(2).</p> <p>Minor Modificaiton = No minor modifications to the monitoring and test methods are used.</p> <p>Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.</p> <p>Flare Type = Flare is in multi-purpose service.</p>
H-2	40 CFR Part 60, Subpart A	60A-0001	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).</p> <p>Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)</p>

Unit ID	Regulation	Index Number	Basis of Determination*
H-2	40 CFR Part 63, Subpart A	63A-0001	<p>Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).</p> <p>Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).</p>
M-4016	30 TAC Chapter 117, Subchapter B	R7ICI-610	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr.</p> <p>NOx Monitoring System = Maximum emission rate testing.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Monitored by method other than CEMS or PEMS.</p> <p>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>NOx Emission Limit Average = Emission limit in parts per million by volume (ppmv).</p> <p>NOx Reductions = No NO_x reduction.</p> <p>Annual Heat Input = Annual heat input is less than or equal to 2.8(10¹¹) Btu/yr, based on rolling 12-month average.</p>
M-4016	40 CFR Part 60, Subpart Dc	60Dc-005	<p>Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005.</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW).</p> <p>SO₂ Inlet Monitoring Type = No SO₂ monitoring.</p> <p>Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB.</p> <p>SO₂ Outlet Monitoring Type = No SO₂ monitoring.</p> <p>Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW).</p> <p>Technology Type = None.</p> <p>D-Series Fuel Type = Natural gas.</p> <p>47C-Option = COMS exemption § 60.47c(e) for a facility not using post-combustion technology (except a wet scrubber), burns only gaseous fuels or fuel oils that contain no more than 0.5 % by weight sulfur, and emissions of CO are 0.15 lb/MMBtu average.</p> <p>ACF Option - SO₂ = Other ACF or no ACF.</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
PRO-CT1A	40 CFR Part 63, Subpart F	63F-010	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is not being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
PROPAINT	30 TAC Chapter 115, Surface Coating Operations	R5421-003	<p>Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested.</p> <p>Facility Operations = Other miscellaneous metal parts and products coating.</p> <p>VOC Emission Rate = Total coating and solvent usage for all surface coating operations on a property is less than or equal to 150 gal/12-month period.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
PRO-W3005C	40 CFR Part 63, Subpart F	63F-010	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is not being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
SAFEKLEEN	30 TAC Chapter 115, Degreasing Processes	R5412-001	<p>Solvent Degreasing Machine Type = Cold solvent cleaning machine.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.</p> <p>Solvent Sprayed = A solvent is sprayed.</p> <p>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.</p> <p>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.</p> <p>Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.</p> <p>Drainage Area = Area is greater than or equal to 16 square inches.</p> <p>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.</p>
SLURP1	30 TAC Chapter 115, Vent Gas Controls	R5121-2	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
SLURP1	40 CFR Part 63, Subpart G	63GV-082	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Overlap = Title 40 CFR Part 63, Subpart G only</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line.</p> <p>Performance Test = No previous performance test was conducted.</p>
T-1	30 TAC Chapter 115, Storage of VOCs	R5112-085	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is less than 4.0 psia</p> <p>Primary Seal = Mechanical shoe, liquid-mounted foam, or liquid-mounted liquid-filled type seal installed before August 22, 1980</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-1	40 CFR Part 63, Subpart G	63GT-005Y	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Two seals, one located above the other, the primary seal being a metallic shoe seal</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p>
T-10	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-10	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
T-11	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-11	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
T-12	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-12	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
T-14	30 TAC Chapter 115, Storage of VOCs	R5112-069	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-14	40 CFR Part 63, Subpart G	63GT-004Y	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = Internal floating roof</p>

Unit ID	Regulation	Index Number	Basis of Determination*
T-2BZ	30 TAC Chapter 115, Storage of VOCs	R5112-085	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is less than 4.0 psia</p> <p>Primary Seal = Mechanical shoe, liquid-mounted foam, or liquid-mounted liquid-filled type seal installed before August 22, 1980</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-2BZ	40 CFR Part 63, Subpart G	63GT-005Y	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Two seals, one located above the other, the primary seal being a metallic shoe seal</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p>
T-2CU	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-2CU	40 CFR Part 63, Subpart G	63GT-042	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is subject to 40 CFR Part 60, Subpart Kb.</p>
T-4	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-4	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
T-5	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-5	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
T-7	30 TAC Chapter 115, Water Separation	R5131-000	<p>Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>Exemption = Any single or multiple compartment VOC water separator which is designed solely to capture stormwater, spills, or exterior surface cleanup waters and is fully covered.</p>
T-8	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-8	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
T-9BZ	30 TAC Chapter 115, Storage of VOCs	R5112-083	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-9BZ	40 CFR Part 63, Subpart G	63GT-005Y	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Two seals, one located above the other, the primary seal being a metallic shoe seal</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p>

Unit ID	Regulation	Index Number	Basis of Determination*
T-9CU	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
T-9CU	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
TRK-15	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
TRK-15	40 CFR Part 63, Subpart G	63GL-og2a	<p>Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).</p> <p>Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.</p>
V-113	30 TAC Chapter 115, Vent Gas Controls	R5121-23	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
V-114	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
V-15	30 TAC Chapter 115, Water Separation	R5131-006	<p>Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>Exemption = Water separator does not qualify for exemption.</p> <p>Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131.</p> <p>Control Device = Control device or vapor recovery system other than a chiller, carbon adsorber, or incinerator.</p>
V-18	30 TAC Chapter 115, Water Separation	R5131-001	<p>Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
V-2004	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-2012	30 TAC Chapter 115, Water Separation	R5131-001	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.
V-2017	30 TAC Chapter 115, Water Separation	R5131-004	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Direct flame incinerator.
V-24	30 TAC Chapter 115, Vent Gas Controls	R5121-4	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
V-2601	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-28	30 TAC Chapter 115, Vent Gas Controls	R5121-3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
V-3024	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3025	30 TAC Chapter 115, Water Separation	R5131-003	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = The compartment has all openings sealed and totally encloses the liquid contents with gauging and sampling devices that are vapor tight except when in use.

Unit ID	Regulation	Index Number	Basis of Determination*
V-303A	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-303B	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-303C	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-303D	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-304A	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-304B	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-305	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3094	30 TAC Chapter 115, Storage of VOCs	R5112-053	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Direct-flame incinerator

Unit ID	Regulation	Index Number	Basis of Determination*
V-3094	40 CFR Part 63, Subpart G	63GT-020	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Closed Vent System = Closed vent system is operated and maintained under negative pressure.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>Bypass Lines = Closed vent system has no by-pass lines.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Control Device Type = Control device other than a flare, thermal incinerator, boiler, process heater, enclosed combustion device meeting residence time and temperature requirements, carbon adsorber, condenser or hazardous waste incinerator.</p> <p>Emission Control Type = Closed vent system (CVS) and control device (fixed roof)</p> <p>Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%.</p> <p>Design Evaluation Submitted = Results of a performance test was submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
V-3106A	30 TAC Chapter 115, Storage of VOCs	R5112-00a	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
V-3106A	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
V-3106B	30 TAC Chapter 115, Storage of VOCs	R5112-00a	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
V-3106B	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
V-3110	30 TAC Chapter 115, Vent Gas Controls	R5121-23	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
V-3111	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
V-3112	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
V-3406A	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3406B	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3407A	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Construction Date = On or after May 12, 1973 Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
V-3407B	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3409	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3410	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
V-3410	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.

Unit ID	Regulation	Index Number	Basis of Determination*
V-3411	30 TAC Chapter 115, Vent Gas Controls	R5121-23	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
V-3603A	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
V-3603B	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
V-3603C	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
V-4002PH	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-032	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
V-4003AAMS	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
V-4003APH	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
V-4003APH	40 CFR Part 63, Subpart G	63GL-og2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.

Unit ID	Regulation	Index Number	Basis of Determination*
V-4003BAMS	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
V-4003BPH	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
V-4003BPH	40 CFR Part 63, Subpart G	63GL-og2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
V-413	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
V-43	30 TAC Chapter 115, Water Separation	R5131-006	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Control device or vapor recovery system other than a chiller, carbon adsorber, or incinerator.
V-44	30 TAC Chapter 115, Vent Gas Controls	R5121-4	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.

Unit ID	Regulation	Index Number	Basis of Determination*
V-48	30 TAC Chapter 115, Vent Gas Controls	R5121-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
V-48	30 TAC Chapter 115, Vent Gas Controls	R5121-3	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
V-48	40 CFR Part 63, Subpart G	63GV-012	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 63, Subpart G only</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p>
V-502A	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
V-502A	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
V-502B	30 TAC Chapter 115, Storage of VOCs	R5112-00c	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
V-502B	40 CFR Part 63, Subpart G	63GT-043	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
V-81B	30 TAC Chapter 115, Vent Gas Controls	R5121-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
V-81B	30 TAC Chapter 115, Vent Gas Controls	R5121-3	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
V-81B	40 CFR Part 60, Subpart NNN	60NNN-048	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr).</p> <p>Vent Type = A single distillation unit discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
V-81B	40 CFR Part 60, Subpart NNN	60NNN-049	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved through use of a flare or recovery device.</p> <p>Subpart NNN Control Device = Flare.</p> <p>Vent Type = A single distillation unit discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p>
V-85	30 TAC Chapter 115, Vent Gas Controls	R5121-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
V-85	40 CFR Part 63, Subpart G	63GV-012N	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p>

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 19043	Issuance Date: 12/06/2005
Authorization No.: 4825A	Issuance Date: 06/27/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.264	Version No./Date: 03/14/1997
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 53	Version No./Date: 07/20/1992
Number: 102	Version No./Date: 07/20/1992
Number: 107	Version No./Date: 07/20/1992
Number: 118	Version No./Date: 05/04/1994

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: H-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-004
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Visible emissions observations not conducted weekly or observation indicates presence of visible emissions. A Method 9 observation conducted within 24 hours of observing visible emissions negates the deviation, provided the opacity is less than 15%.	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SAFEKLEEN	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-001
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: monthly	
Averaging Period: n/a	
Deviation Limit: Visual inspection not performed at least once per month or inspection indicates non-compliance with an applicable requirement in 30 TAC 115.412(1)(A) - (F).	
<p>Basis of monitoring:</p> <p>The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.</p>	

Unit/Group/Process Information	
ID No.: V-28	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of operation of the process heater. All periods that are not recorded shall be considered and reported as a deviation.	
<p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p>	

Unit/Group/Process Information	
ID No.: V-3025	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-003
Pollutant: VOC	Main Standard: § 115.132(a)(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: annually	
Averaging Period: n/a*	
Deviation Limit: Oil-Water Separator is not inspected at least annually using a hydrocarbon gas analyzer or inspection detects a VOC concentration greater than 10,000 ppmv for a seal around a shaft that passes through a cover and 500 ppmv for all other interfaces.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-3025	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-003
Pollutant: VOC	Main Standard: § 115.132(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: monthly	
Averaging Period: n/a	
Deviation Limit: Oil-Water Separator not visually inspected at least monthly for defects or inspection indicates defects that could result in air emissions, such as a hole or a gap/crack in a sealed opening.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p>	

Unit/Group/Process Information	
ID No.: V-48	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: All periods that are not recorded shall be considered and reported as a deviation.	
<p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p>	

Unit/Group/Process Information	
ID No.: V-81B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: All periods that are not recorded shall be considered and reported as a deviation.	
<p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p>	

Compliance Review

Compliance History Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on **8/10/15**
Site rating: **0.03 / High** Company rating: **0.03 / High**
(*High < 0.10; Satisfactory ≥ 0.10 and ≤ 55 ; Unsatisfactory > 55*)
2. Has the permit changed on the basis of the compliance history or site/company rating? **No**

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? **No**
2. Is a compliance plan and schedule included in the permit?..... **No**

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes

OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes